

REMARKS

Claims 1-18 and 20-31 are pending in this application. By this Amendment, claim 19 is canceled, claims 1-3, 5-7, 9, 11-14, 16-18, and 22-26 are amended, and claims 27-31 are added, and the abstract is amended to correct typographical errors and to put the abstract into conformance with United States practice. Support for the amendment to claim 6 is found, for example, in the specification, page 8, lines 16-17; support for the amendments to claim 1 is found, for example, in originally filed claim 1; and support for the amendments to claims 22-24 and 26 is found, for example, in the specification at page 6, lines 1-4, and page 17, line 32, to page 18, line 20. Support for new claims 27-31 is found in original claims 1, 2, 12, 13, 17, and 18. No new matter has been added.

Claim Rejection under 35 U.S.C. § 112, second paragraph

The Examiner rejected claims 1-26 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. Applicant respectfully traverses the rejection.

The Examiner stated that the terms "obtainable" (claims 1, 12, and 13), "preferably" (claims 1-3, 7, 11, and 12), "in particular" (claims 1-3, 7, 11, and 12), "especially" (claims 1-3, 7, 11, and 12), "if desired" (claims 1-26), "in particular" (claims 1, 3, 11-13, 17, and 18), and "DMC" (claim 6); the trade names in claim 11; and the use set forth in claim 19 render claims 1-26 indefinite.

Although Applicant does not agree with the Examiner's bases for the rejection, in an effort to expedite prosecution and without acquiescing in the propriety of the rejection, Applicant has amended or canceled the claims containing the allegedly indefinite language such that the language is no longer in the claims.

In view of the foregoing, reconsideration and withdrawal of the rejection are respectfully requested.

Claim Rejection under 35 U.S.C. § 101

The Examiner rejected claim 19 under 35 U.S.C. § 101 as being an improper process claim for failing to set forth method steps. Applicant respectfully traverses the rejection. However, in an effort to expedite prosecution and without acquiescing in the propriety of the rejection, Applicant has canceled 19.

In view of the foregoing, reconsideration and withdrawal of the rejection are respectfully requested.

Claim Rejection under 35 U.S.C. § 112, first paragraph (enablement)

The Examiner rejected claims 1-26 under 35 U.S.C. § 112, first paragraph, stating that the specification does not reasonably provide enablement for undisclosed substituents encompassed by the claims. Applicant respectfully traverses the rejection.

Applicant presumes that the term "substituted" referred to by the Examiner is found in claim 1, wherein Y¹ and Y² are independently optionally substituted. The term "substituted" is commonly used to describe the mechanism by which an atom or chemical group generally replaces a hydrogen atom at a carbon atom in a chemical entity. Thus, Y¹ and Y² are independently an alkyl, aryl, or arylalkyl group, wherein the alkyl, aryl, or arylalkyl group may contain additional atoms or chemical groups branching off from the original alkyl, aryl, or arylalkyl group, respectively. Selection of substituents is well-within the purview of one of ordinary skill in the art, and thus there is no undue experimentation in determining appropriate substituents.

In view of the foregoing, reconsideration and withdrawal of the rejection are respectfully requested.

Double Patenting Rejections

The Examiner provisionally rejected claims 1-26 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over: (1) claims 1-25 of copending U.S. Appl. No. 10/501,074; and (2) claims 1-21 of copending U.S. Appl. No. 10/501,078 in view of EP 477060 A1 ("Piestert"), EP 469751 A1 ("Aoki"), U.S. Patent No. 4,469,831 ("Bueltjer"), U.S. Patent No. 4,853,454 ("Merger"), and U.S. Patent No. 5,116,931 ("Reisch"). Applicant respectfully traverse the rejections.

Solely in an effort to expedite prosecution and without acquiescing in the propriety of the rejection, Applicant proffers filing a terminal disclaimer once claims have been allowed.

In view of the foregoing, reconsideration and withdrawal of the rejections are respectfully requested.

Rejection under 35 U.S.C. § 103

The Examiner rejected claims 1-26 under 35 U.S.C. § 103(a) as being unpatentable over EP 477060 A1 ("Piestert") in view of EP 469751 A1 ("Aoki"), U.S. Patent No. 4,469,831 ("Bueltjer"), U.S. Patent No. 4,853,454 ("Merger"), and U.S. Patent No. 5,116,931 ("Reisch"). Applicant respectfully traverses the rejection.

Citing to the entire European patent application, the Examiner stated that Piestert discloses the claimed compositions and uses, but "is silent regarding the ... chemical nature of the blocking agents" (Office Action, p. 8).

In response, Applicant asserts that Piestert discloses a polyurethane sealant composition containing a prepolymer and a blocked curing agent that can be liberated by

water. The Examiner stated that Piestert is "silent" with regard to the specific curing agent, however, Piestert does disclose the intended agents on page 3, lines 8-15. The blocking occurs by molecular sieve or chemically, wherein the curing agent, i.e., at least one difunctional amine derivative, converts into its corresponding enamine or ketimine function. Alternative curing agents are oxazolidines.

Applicant's claims require that the curing agent in the claimed compositions is at least one polyaldimine obtained from at least one polyamine having aliphatic primary amino groups and at least one non-aromatic aldehyde. A polyaldimine is not a difunctional amine derivative having an enamine or ketimine function, and is not an oxazolidine.

To remedy the deficiency of Piestert, the Examiner surmised that it would have been obvious to use the aldehyde-blocked polyaldimines as claimed instead of the blocked polyamines disclosed by Piestert because "such aldimines are well known for use in moisture cured polyurethane adhesive/sealants" (Office Action, p. 8). The Examiner cited Aoki, Bueltjer, and Merger in support of this position.

In an obviousness rejection, one must remember the requirements for combining references, i.e., (1) a suggestion, teaching, or motivation to combine the references, and (2) a reasonable expectation of success of obtaining the claimed invention once the references are combined, which are both necessary to establish a *prima facie* case of obviousness. In describing the basis for the rejection, the Examiner combined the references by picking and choosing individual characteristics of the claimed compositions from each applied reference and then combining these individual characteristics into a hypothetical composition allegedly akin to the claimed compositions. However, by picking and choosing individual teachings of the references and then trying to put the selected teachings together to arrive at the claimed compositions, the Examiner takes each applied reference out of context. Simply because some of the individual components of the claims might be found in different references does

not suggest the selective combination of those components to obtain the polyurethane compositions as claimed. Motivation must be present before combining references, not after one has already decided what they wish the combination to show. Moreover, motivation is clearly absent when, as in this case, a reference teaches away from the hypothetical combination.

Specifically, the Examiner takes the position that one of ordinary skill in the art could substitute Piestert's difunctional amine or oxazolidine curing agent with Aoki's polyaldimine curing agents. However, Aoki specifically states that the type of curing agents employed by Piestert are not acceptable in Aoki's polyurethane compositions. *See, e.g.*, page 2, lines 14-53. Moreover, Aoki's polyaldimines are not a substitute for Applicant's polyaldimines because the former is derived from an aromatic aldehyde, whereas the latter is obtained from a non-aromatic aldehyde. *See, e.g.*, Aoki, p. 3, lines 5-26. Thus, even if combined with Piestert, the combination fails to generate the claimed compositions.

Bueltjer and Merger suffer from similar issues. First, Bueltjer and Merger employ a polyaldimine in their respective polyurethane compositions. As noted above, a polyaldimine is not a difunctional amine derivative having an enamine or ketimine function, and is not an oxazolidine. Thus, one would not readily substitute one for the other.

In addition, Bueltjer employs the aldehyde 3-isobutyroxy-2,2-dimethylpropanal to generate the polyaldimine in the polyurethane composition (*see, e.g.*, column 6, lines 34-37); and Merger employs aldehydes having the formulae set forth at column 3, lines 3-11, to generate the polyaldimine in the polyurethane composition. None of the resulting aldehyde-generated polyaldimines disclosed by Bueltjer and Merger are encompassed by the aldehyde-generated polyaldimines in the claimed compositions. The aldehyde set forth in claim 1 has a

different structure than that disclosed by Bueltjer and Merger.¹ Thus, even if combined with Piestert, the combination fails to generate the claimed compositions.

The Examiner further surmised that it would have been obvious to use DMC as claimed in claim 6 to catalyze the "polyethers of the prepolymers discussed above" to reduce production of monol, which reduces unsaturation, "which gives less chain termination and therefore raises the molecular weights and the modulus and the attending properties related" thereto (Office Action, pp. 8-9). Reisch is cited to support this position.

It is not clear how the Examiner is applying Reisch in combination with Piestert. Reisch fails to remedy the deficiency of Piestert because it does not disclose the polyaldimine that is missing from Piestert. Thus, even if combined, one of ordinary skill in the art would not arrive at the claimed compositions.

Because there is no motivation, teaching, or suggestion to combine the references as done so by the Examiner and because, even if combined, one of ordinary skill in the art would not obtain the compositions as claimed, the references, alone or in combination, do not render the claims obvious.

In view of the foregoing, reconsideration and withdrawal of the rejection are respectfully requested.

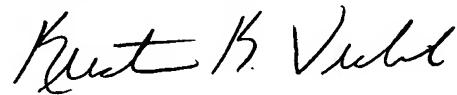
¹ Regarding Merger, the Examiner stated that the ester moiety of R₃ results in an aldehyde encompassed by the claims. However, the structure set forth in claim 1, requires CH₂C(=O)R¹, wherein R¹ is a linear or branched 11-30 carbon alkyl chain or the structure of formulae II or III. Neither R₃ nor R₄ disclosed by Merger results in the aldehyde required in the claims.

Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-18 and 20-31 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:

Amended Abstract

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